

# Forest Legacy Project

## Silver Springs Watershed

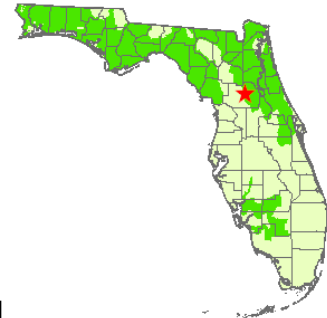
### Marion County, Florida



#### FUNDING HISTORY

FY 2017 Forest Legacy Program Funding \$3,500,000  
FY 2017 Non-Federal Cost Share \$7,194,000  
FY 2017 Project Costs \$10,694,000  
FY 2017 Project Acres 5,347

Forest Legacy Funding To Date \$0  
Total Project Costs \$25,175,850  
Total Project Acres 12,325



★ Project Location  
Forest Legacy Areas

Tract Name	Size (ac)	Tract Cost	FLP Funding	Non-Fed Cost Share	Status
Marion Forest	4,871	\$11,446,850	\$3,700,000	\$7,746,850	Proposed 2016
Marshall Swamp	2,107	\$3,035,000	\$2,275,000	\$760,000	Proposed 2018
Ocklawaha I	2,695	\$5,390,000	\$0	\$5,390,000	Proposed 2017
Ocklawaha II	2,652	\$5,304,000	\$3,500,000	\$1,804,000	Proposed 2017

#### GENERAL DESCRIPTION

Forests west of the Ocala National Forest are disappearing at an alarming rate. The Silver Springs Watershed (SSW) is a project advanced by a coalition of private, nonprofit, county and state agency partners acting aggressively to protect the globally significant Silver Springs and Ocklawaha River Aquatic Preserve. The SSW is the #4 ranked Forest Legacy Program project for 2016. The timberlands of the SSW are the most compatible land use for wildlife and clean water for one of the world's most iconic freshwater spring systems. Today, the impaired springs and rivers are threatened and the Adena Springs Ranch is changing this once forested landscape, destroying wildlife habitat and threatening water resources with increased groundwater withdrawal and nutrient loading. The SSW stands as the best opportunity to protect and restore freshwater flow to the springs and nearby rivers. FEE acquisition of Half Mile Creek in 2014 and Marion Forest in December 2015 and CONSERVATION EASEMENTS on Ocklawaha I and II will significantly enhance long-term prospects for clean springs and rivers; the recreation element of Marion County's economy and Florida's largest black bear population.



Cavern divers in Silver Springs (Photo by John Moran)

#### PROJECT FEATURES

##### Important

- **ECONOMIC BENEFITS – TIMBER:** The 12,325 acres in the SSW contain more than 8,000 acres of managed pine timber that contribute to the \$5.5 billion annual economic impact and 26,000 jobs attributable to the forest products industry in northeast Florida.

- The Ocklawaha tracts were Sustainable Forestry Initiative certified from 2001 – 2014. The Ocklawaha and Marshall Swamp tracts are now certified forester managed pursuant to a management plan. The average site index (75) of these tracts exceeds the typical index found in northeast Florida.
- **ECONOMIC BENEFITS – NON-TIMBER:** The SSW is essential to preserving land and water recreation within a vast network of existing public lands and supporting the Florida Black Bear Scenic Byway, Florida National Scenic Trail and a revitalized Silver Springs attraction.
- Silver Springs State Park and the Cross Florida Greenway attract over one million visitors annually that directly inject over \$90 million into the local economy according to an economic impact assessment for the Florida State Park System released October 2014.
- **THREATENED OR ENDANGERED SPECIES HABITAT:** The U.S. Fish and Wildlife Service notes that 43% of federally listed threatened or endangered species in the downstream Ocklawaha River Aquatic Preserve rely directly or indirectly on wetlands for their survival such as those located on Ocklawaha I and II.
- The SSW advances the Florida State Wildlife Action Plan by preserving habitat for at least five Species of Greatest Conservation Need: the federally-listed Eastern indigo snake, Florida black bear, gopher tortoise, Florida pine snake and Sherman's fox squirrel.
- **FISH, WILDLIFE, PLANTS AND UNIQUE FOREST COMMUNITIES:** The SSW is an opportunity to restore Natural Pineland and protect Spring/Spring Run and Softwater Stream habitats; three of the 18 habitats identified by the State Wildlife Action Plan as being under the greatest threat of conversion.
- The Florida black bear is common in the SSW, where habitat is critical to the distribution of bears between their core habitat in the Ocala National Forest and state-owned and managed public lands west of the Ocklawaha River.
- **WATER SUPPLY, AQUATIC HABITAT AND WATERSHED PROTECTION:** The SSW is essential to water quality at Silver Springs - the second largest freshwater springs group in the country - and the Ocklawaha River Aquatic Preserve, one of only four freshwater aquatic preserves in Florida.
- The SSW plays a pivotal role in balancing the watershed impacts from the Adena Springs Ranch, a new high density, grass-finished beef cattle operation, by maintaining forest habitats and improving forest management to potentially improve aquifer recharge and reduce nonpoint source pollution.
- Protecting and maintaining the forest lands of the SSW, particularly Ocklawaha I and II, will prevent conversion to more intensive agriculture or rural uses that would undoubtedly harm the springs and aquatic preserve by increasing nonpoint source pollution and consumptive groundwater withdrawal.
- Almost 45% of the SSW protects moderate to high recharge zones for Silver Springs. Most of Ocklawaha I and II, and almost 78% of the SSW, lies in the two and ten-year capture zones for Silver Springs, where rainfall percolating into the groundwater emerges from the springhead within ten years.
- At least three small streams, including Daisy Creek, and high priority forested wetlands filter and clean surface water flowing from agricultural lands southeasterly through Ocklawaha I and II into the Ocklawaha River, the largest tributary of the St. Johns River, and its aquatic preserve.
- Ocklawaha I and II present the opportunity for the St. Johns River Water Management District to develop water resources improvement projects that can further clean agricultural runoff before flowing into the Ocklawaha River and its aquatic preserve.
- **PUBLIC ACCESS:** Public purchase of Marion Forest fulfills the Marion County Silver Springs Regional Connectivity Plan to link campers, hikers and equestrian users in Indian Lake State Forest with existing and planned trails in Silver Springs State Park, including the Florida National Scenic Trail.



Natural timber stand filtering surface water flow into the Ocklawaha River (Photo by Keith Fountain)

- Protection of the SSW enables the expansion and integration of outdoor recreation pursuant to existing multiple use concepts at adjacent lands managed by the Florida Forest Service, Florida Department of Environmental Protection, Marion County and U.S. Forest Service.
- SCENIC: The SSW provides a scenic buffer to the Black Bear National Scenic Byway (State Road 40) and County Road 315, a popular access route to the byway and Ocklawaha River Aquatic Preserve.
- Ocklawaha I and II protect and enhance the scenic experience of the Ocklawaha River paddling trail and recreational users in the Ocala National Forest and Ocklawaha River Aquatic Preserve.
- HISTORIC/CULTURAL: Florida's historical records identify four prehistoric archaeological sites on the Ocklawaha I and II that are located along or near the Ocklawaha River and related to habitation in this landscape where humans have lived for over 9,000 years.

## Threatened

- LACK OF PROTECTION: Ocklawaha I and II are less than 3.5 miles from Silver Springs, tourist facilities and the Ocala city limits and lack any legal or regulatory restrictions that prevent conversion, fragmentation or parcelization for many agricultural, recreational or residential uses.
- LAND AND LANDOWNER'S CIRCUMSTANCE: Ocklawaha I and II are threatened by conversion to pasture for more cattle grazing, residential use and parcelization, if passed to the next generation without protection by conservation easements.
- A CONSERVATION EASEMENT on Ocklawaha I and II will prevent conversion to more intensive uses and reduce the threat of the sale of the property to the owners of the Adena Springs Ranch, who have made unsolicited purchase offers in the past.
- ADJACENT LAND USE: A Canadian billionaire has purchased 30,000 acres in the upstream watershed headwaters less than one mile from Ocklawaha II and is converting its forests to pasture for the Adena Springs Ranch, a proposed high density, grass-finished beef operation.
- The conversion of forests to pasture by Adena Springs has destroyed thousands of acres of black bear habitat north and west of Ocklawaha I and II. Intensive cattle management may significantly increase nonpoint source pollution into the watershed negatively impacting both the springs and rivers.
- Adena Springs has a 61,000 square feet slaughterhouse that can process 300 cattle per week. This harvest capacity may encourage surrounding landowners to convert to beef production, and the byproducts of processing may contribute additional pollutants to the watershed.
- Studies of groundwater withdrawal permit applications for Adena Springs Ranch indicated 6,400 cattle could add 834,601 pounds of nitrogen to the watershed annually, and require 228 gallons of groundwater withdrawal per day per cow for pasture maintenance and slaughterhouse operations.
- ABILITY TO DEVELOP: No significant regulations or physical limitations prevent development of the SSW. County regulations allow the mitigation of environmental issues, including wetlands, to build the maximum allowable residential units (517) on Ocklawaha I and II.
- The zoning for Ocklawaha I and II permits a wide variety of agricultural and residential uses, and its more than five miles of frontage on two paved roads with utilities facilitates and encourages parcelization of the project for residential development and recreation.



Aerial view of 3.5 mile forest clear cut by Adena Springs Ranch  
(Photo by Karen Chadwick)



## Strategic

- **CONSERVATION INITIATIVE, STRATEGY OR PLAN:** The SSW is critical to the flows and water quality of Silver Springs, designated a National Natural Landmark in 1971 to recognize and encourage conservation of its outstanding biological and geological resources. The National Park Service identifies it as the largest artesian spring group in the United States and one of the great groups in the world.
- Intensive management of the timber on Ocklawaha I and II with herbicides and fertilizers that are nonpoint sources of pollution in the Ocklawaha River Aquatic Preserve has been replaced by a private management regime with fire and no fertilization that will better achieve the goals recognized by the Clean Water Act for forest management in watersheds.
- Ocklawaha I and II support the pending Silver River and Springs Basin Management Action Plan (BMAP) – Florida's tool for restoring impaired waters by reducing pollutant loadings – by increasing the BMAP area protected for conservation from 17.46% to 18.3% of the plan area. The balance of the SSW further increases the area to 19.4% of the plan area.
- The SSW supports the Indian Lake State Forest Management Plan by protecting Marion Forest and Ocklawaha I and II within its Optimum Management Boundary, and supports the Ocklawaha River Aquatic Preserve Management Plan by protecting privately-owned portions of the aquatic preserve on Ocklawaha I and II.
- The protection of Ocklawaha I and II supports the Florida Black Bear Management Plan goal to maintain at least 1,000 bears in the Central Bear Management Unit, Florida's largest subpopulation, by protecting necessary habitat, preserving forested connections and acquiring lands that may enable construction of wildlife underpasses.
- The SSW supports the 2013 Initiative to Protect Florida's Springs and Significant Water Resources by decreasing fertilization and preventing development impacts, particularly septic tanks. It supports the Restoration Plan for the Silver Springs and River by preventing forest conversion to land uses that reduce aquifer recharge and increase nutrient contamination to the spring and river.
- Ocklawaha I and II are ranked in the top tier of projects for the Florida Department of Agriculture and Consumer Services Rural and Family Lands Protection Program which will provide matching funds for the purchase of a CONSERVATION EASEMENT.
- The SSW complements the Governor's Florida Springs Initiative, which seeks to improve spring conditions by regulating minimum flows and levels (spring flow) and total maximum daily loads (water quality), by protecting and better managing forests to increase recharge to the aquifer and reduce the forests' contribution to nonpoint source pollution of the spring and aquatic preserve.
- **COMPLEMENT PROTECTED LANDS:** The SSW, and particularly Ocklawaha I and II, significantly improve landscape connectivity for wildlife, particularly the Florida black bear, and outdoor recreation by linking the Indian Lake State Forest, Silver Springs State Park, Marjorie Harris Carr Cross Florida Greenway and Ocala National Forest.
- The protection of Ocklawaha I and II will complement the 2014 acquisition of the 716-acre Half Mile Creek and the anticipated December 2015 acquisition of the 4,871-acre Marion Forest by the St. Johns River Water Management District, as well as ongoing negotiations for the 465-acre Sandhill. The 2,107-acre Marshall Swamp will be protected as the 2018 phase of the SSW.



Restoration will address sedimentation flowing into the Silver River (Photo by St. Johns River Water Mgmt District)

## Readiness

Pre-Appraisal/Market Analysis	1
Easement or Fee Conditions	1
Non-Federal Cost Share Commitment	0
Signed Purchase Agreement	0
Title Search	1
Mineral Determination	1
Stewardship Plan (or equivalent)*	1
<b>Readiness Total Tally Score</b>	<b>5</b>

## Supporting Parties

Ocala National Forest; Florida Forest Service; Florida Department of Environmental Protection; St. Johns River Water Management District; Marion County; Conservation Trust for Florida; The Felburn Foundation; Florida Springs Institute; Florida Audubon; Florida Defenders of the Environment; Silver Springs Alliance; Marion County Springs Festival; St. Johns Riverkeeper; Santa Fe Audubon; Marion Audubon; John Hankinson, Jr., former U.S. EPA Regional Administrator; and U.S. Senator Bill Nelson.

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